

DERWENT-ACC-NO: 1995-298873

DERWENT-WEEK: 199539

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TITLE: Resin laminate with high heat  
sealing and gas barrier  
properties - obtd. by laying ionomer  
based layer with  
resin based on ethylene@! alpha-  
olefin! copolymer and  
low crystalline ethylene@!-alpha-  
olefin!

PATENT-ASSIGNEE: MITSUI PETROCHEM IND CO LTD[MITC]

PRIORITY-DATA: 1993JP-0337356 (December 28, 1993)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
JP 07195637 A		August 1, 1995	N/A
007	B32B 027/32		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
JP 07195637A	N/A	1993JP-
0337356	December 28, 1993	

INT-CL (IPC): B32B007/04, B32B027/08 , B32B027/28 ,  
B32B027/32 ,  
C08L023/08 , C08L023/26 , C08L051/06

ABSTRACTED-PUB-NO: JP 07195637A

BASIC-ABSTRACT:

Resin laminate (1) is obtd. by laying layer (1) composed of  
an ionomer with

layer (2) composed of:

(A) one of resin compsn. having a density of 0.930 g/cm<sup>3</sup>.  
composed of:

(a) **crystalline ethylene**-alpha-olefin copolymer having  
density of 0.89-0.94  
g/cm<sup>3</sup>. obtd. by polymerisation with a transition metal  
catalyst, and

(b) amorphous or low **crystalline ethylene**-alpha-olefin  
copolymer having density  
of up to 0.89 g/cm<sup>3</sup>. and crystallinity of up to 40%;

(B) resin compsn. of 95-50 wt.% of:

(c) **crystalline ethylene**-alpha-olefin copolymer having a  
density at least 0.92  
g/cm<sup>3</sup>. obtd. by the polymerisation with a transition metal  
catalyst; and

(d) 5-50 wt.% of **ethylene-vinyl acetate copolymer,**  
**ethylene**-acrylic acid  
copolymer and ethylene-ethyl acrylate copolymer; and

(C) resin compsn. obtd. by grafting the resin compsn. (A)  
or (B) with an  
unsatd. carboxylic acid.

Also claimed is resin laminate (II) obtd. by:

(i) laying the layer (1) with the layer (2) composed of the  
resin compsn. (C),  
and

(ii) laying the layer (2) with resin layer (3) composed of  
nylon or  
ethylene-vinyl alcohol copolymer.

ADVANTAGE - The laminate has a high heat sealing property  
and a high gas  
**barrier** property.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: RESIN LAMINATE HIGH HEAT SEAL GAS BARRIER  
PROPERTIES OBTAIN LAY

IONOMER BASED LAYER RESIN BASED POLYETHYLENE@  
ALPHA POLYOLEFIN  
COPOLYMER LOW CRYSTAL POLYETHYLENE@ ALPHA  
POLYOLEFIN

ADDL-INDEXING-TERMS:  
VINYL!

DERWENT-CLASS: A17 A94 P73

CPI-CODES: A04-F04; A04-F05; A04-G01C; A05-F01C; A09-A01A;  
A09-A09; A10-E21B;  
A11-B09;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

017 ; P0588

Polymer Index [1.2]

017 ; ND01 ; ND09 ; B9999 B5312 B5298 B5276 ; B9999  
B4864 B4853

B4740 ; N9999 N7192 N7023 ; K9574 K9483 ; K9676\*R ;  
Q9999 Q7818\*R

Polymer Index [1.3]

017 ; N9999 N7090 N7034 N7023

Polymer Index [2.1]

017 ; G0033\*R G0022 D01 D02 D51 D53 ; R00326 G0044  
G0033 G0022 D01

D02 D12 D10 D51 D53 D58 D82 ; G0022\*R D01 D51 D53 D60  
D51\*R F35\*R

H0146 ; H0011\*R ; H0088 H0011 ; L9999 L2528 L2506 ;  
P1150

Polymer Index [2.2]

017 ; ND01 ; ND09 ; B9999 B5312 B5298 B5276 ; B9999  
B4864 B4853

B4740 ; N9999 N7192 N7023 ; K9574 K9483 ; K9676\*R ;  
Q9999 Q7818\*R

Polymer Index [2.3]

017 ; B9999 B4795 B4773 B4740 ; B9999 B4842 B4831 B4740

Polymer Index [2.4]

017 ; Tr\*R ; C999 C033 C000 ; C999 C293  
 Polymer Index [3.1]  
 017 ; G0033\*R G0022 D01 D02 D51 D53 ; R00326 G0044  
 G0033 G0022 D01  
 D02 D12 D10 D51 D53 D58 D82 ; G0022\*R D01 D51 D53 D60  
 D51\*R F35\*R  
 H0146 ; H0011\*R ; H0088 H0011 ; L9999 L2528 L2506 ;  
 P1150  
 Polymer Index [3.2]  
 017 ; ND01 ; ND09 ; B9999 B5312 B5298 B5276 ; B9999  
 B4864 B4853  
 B4740 ; N9999 N7192 N7023 ; K9574 K9483 ; K9676\*R ;  
 Q9999 Q7818\*R  
 Polymer Index [3.3]  
 017 ; B9999 B4784 B4773 B4740 ; B9999 B4842 B4831 B4740  
 Polymer Index [4.1]  
 017 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53  
 D58 D82 ;  
 R00835 G0566 G0022 D01 D11 D10 D12 D51 D53 D58 D63 D84  
 F41 ; G0022\*R  
 D01 D51 D53 D60 D51\*R F35\*R H0146 ; H0022 H0011 ; H0088  
 H0011 ;  
 L9999 L2528 L2506 ; P1150 ; P1310  
 Polymer Index [4.2]  
 017 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53  
 D58 D82 ;  
 R01126 G0340 G0339 G0260 G0022 D01 D11 D10 D12 D51 D53  
 D58 D63 D85  
 F41 ; G0022\*R D01 D51 D53 D60 D51\*R F35\*R H0146 ; H0022  
 H0011 ;  
 H0088 H0011 ; L9999 L2528 L2506 ; P1150 ; P0088 ;  
 P0180  
 Polymer Index [4.3]  
 017 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53  
 D58 D82 ;  
 R00446 G0282 G0271 G0260 G0022 D01 D12 D10 D51 D53 D58  
 D60 D83 F36  
 F35 ; G0022\*R D01 D51 D53 D60 D51\*R F35\*R H0146 ; H0022  
 H0011 ;  
 H0088 H0011 ; L9999 L2528 L2506 ; P1150 ; P0088 ;  
 P0168  
 Polymer Index [4.4]  
 017 ; ND01 ; ND09 ; B9999 B5312 B5298 B5276 ; B9999

B4864 B4853

B4740 ; N9999 N7192 N7023 ; K9574 K9483 ; K9676\*R ;  
Q9999 Q7818\*R

Polymer Index [5.1]

017 ; P0635\*R F70 D01

Polymer Index [5.2]

017 ; P1332 P1694

Polymer Index [5.3]

017 ; ND01 ; ND09 ; B9999 B5312 B5298 B5276 ; B9999

B4864 B4853

B4740 ; N9999 N7192 N7023 ; K9574 K9483 ; K9676\*R ;  
Q9999 Q7818\*R

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1995-133831

Non-CPI Secondary Accession Numbers: N1995-226828